

2004 STANDARD PLANS DIGEST

11/22/04

This July 2004 edition of the California Department of Transportation Standard Plans is the fourth edition of the Department's Standard Plans based on metric values.

The July 1999 edition of the California Department of Transportation Standard Specifications supports the July 2004 edition of the Standard Plans.

Some of the following listed changes were incorporated in the prior edition of the Standard Plans (July 1999) through the issuance of Revised Standard Plans (RSPs) and New Standard Plans (NSPs).

This digest only identifies the more significant changes made to the July 2004 Standard Plans and is not comprehensive. It will be necessary to view all the plans carefully.

The digest is arranged in the same order as the series of plans that appear in the hardcopy book. The order is: "A" Series - General Road Work (Miscellaneous); "P" Series - General Road Work (Pavements); "C" Series - General Road Work (Crib Walls); "D" Series - General Road Work (Drainage); "H" Series - General Road Work (Planting and Irrigation); "T" Series - General Road Work (Temporary Facilities); "B" Series - Bridge, "RS" Series- Roadside Signs; "S" Series - Overhead Signs, "ES" Series - Electrical Systems.

STANDARD PLAN	CHANGES
"A" Series	
A10A and A10B	Additional abbreviations and acronyms have been added.
A10C and A10 D	A10C contains new symbology for aerial and underground utilities and construction features. A10D contains updated symbols for photogrammetric mapping and waterways.
A20A, A20B, A20C and A20D	Detail 14A has been added to A20A. Detail 36B has been added to A20C. Detail 41 has been added and the recess detail for retroreflective pavement marker revised in Sections A-A and B-B on A20D. No significant changes made to A20B.
A24A through A24D	No significant changes made to these plans.
A24E	A new detail for Yield Line has been added. A "No Parking" pavement marking detail, for use with accessible parking spaces, has been added.
-----	The former A35 Series of Standard Plans relating to pavements has been completely revised and renamed as the 'P' Series, which now follow the 'A' Series of Standard Plans.
A40A and A40B	Details for shoulder rumble strips have been revised. A40A for rolled-in indentations. A40B for ground-in indentations.
A62A, A62B, A62C, A62D, A62E and A62F	No significant changes made to these plans.
A62DA	The Type 1, 2 and 3 installation instructions have been revised. General Notes 8, 9 and 10 have been revised.
A63A and A63B	These two new plan sheets contain details for Portable Concrete Barrier (Type 60K). Typically used to close gaps in barriers on an interim basis. Also used to provide an emergency opening in lengthy runs of median barrier where no other reasonable detour routing is available and an emergency closes the highway for one direction of travel.

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A73A and A73B	No significant changes made to these plans.
A73C	Details for Class 2 metal post delineator have been added. Notes 4, 5 and 6 have been added.
A74	No significant changes made to this plan.
-----	A75D, which contained details for concrete headlight glare screen, has been deleted. No longer use this design for glare screen.
A76 SERIES – "GENERAL"	This series of plans has been revised to show the placement of the bottom longitudinal reinforcing bars at 125 mm above the bottom of the barrier for Type 60, Type 60G, and Type 60S.
A76J, A76K and A76L	These new plan sheets contain details for construction of various size wildlife passageways in concrete barrier. Wildlife passageways are only to be used when the District Biologist has determined that such passage is necessary and the location will be determined via consultation with the District Biologist.
A77 SERIES – "GENERAL"	<p>Most of the A77 Series of Standard Plan sheets have been revised or new sheets developed so that guard railing layouts, end treatments, and transition railings conform to the crash test requirements of the National Cooperative Highway Research Program Report 350 (NCHRP 350) as directed by the Federal Highway Administration. These A77 Series Standard Plans more closely conform to the guidelines set forth in the 2002 AASHTO publication, "Roadside Design Guide."</p> <ul style="list-style-type: none"> • The length of line posts for the standard section of railing has been standardized to 1.83 meters. Plastic notched blocks have been added as an option to the use of notched wood blocks for steel post installations. • The rail height for line posts has been adjusted upward to 705 millimeters with a tolerance of plus or minus 13 millimeters. The post and block will be flush at top for initial installation. An option of future upward adjust of the rail height of 63 mm is available. • Standard Plans A77D1 and A77D2 provide guidance for placement of railing at structures, embankments and fixed objects. A77D1 and A77D2 are not to be included in the list of standard plans applicable to the project. • The guard railing layouts now show the ground line or finished grade in front of the railing on a 10:1 or flatter slope (perpendicular to the railing face). • New typical layouts have been developed for construction of railing at structure approaches and departures and for construction of railing recommended to shield embankment slopes and fixed objects. Layout types are designated as alphanumeric beginning with Layout Type 11A and ascend in order. Layouts are grouped into different series of standard plans based on the type of installation involved. The A77E Series of Standard Plans is for the shielding of embankment slopes. The A77F Series of Standard Plans is for the shielding of bridge railing ends at structure approaches and departures. The A77G Series of Standard Plans is for shielding fixed objects.
A77A1 and A77A2	<ul style="list-style-type: none"> • These plans have been revised to show the actual length of a rail element (4.126 m) and the rail element splice interval of 3.8 meters. This should eliminate confusion by designers regarding the length of railing required for a specific location (runs of line railing equal to multiples of 3.8 meters). Measurement and payment for quantities of terminal system end treatments or anchors, as applicable, paid as unit items. • The length of line posts for the standard section of railing has been standardized to 1.83 meters. The rail height for line posts has been adjusted upward to 705 millimeters with a tolerance of plus or minus 13 millimeters. An option of future

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	<p>upward adjust of the rail height of 63 mm is available. There will be two holes in the upper portion of the wood post. There will be two holes on each side of the web in the upper portion of the steel post. When the rail and block are attached to the post for the initial installation the top elevation of the post will match the top elevation of block. Future upward adjustment of the rail height, without post height adjustment, may be achieved by moving the block and rail upward 63 millimeters from the existing position on the post and attaching them to the post in the upper pre-drilled hole.</p> <ul style="list-style-type: none"> • A77A2 provides for the use of an approved-notched plastic block with steel line post installations as an option to use of notched wood blocks.
A77B1	<p>The terminology for hardware attached to the ends of metal beam railing has been changed by eliminating the use of the terms “terminal” and “section” as in terminal section and return section. The hardware attached to the ends of metal beam railing is now identified as various types of end caps and return cap. The details for the optional design for “End Cap (Type C)” formerly identified as “Terminal Section (Type C)” have been removed since they created confusion by identifying a portion of the hardware as terminal connector. The use of “End Cap (Type C)” in new railing construction will be limited to warranted situations. Details of the flat plate washer formerly used under the bolt head against the rail element have been removed from this plan. Flat plate washers on rail faces are not to be used to construct railing.</p>
A77C1	<p>The length of the 150-mm x 200-mm line posts for the standard section of railing has been standardized to 1.83 meters. The length of the 200-mm x 200-mm line posts, typically used for narrow roadway installations, is 2.13 meters. The length of the 250-mm x 250 mm posts, typically used for railing installations to shield fixed object with less than 1.2 meter offset from face of railing to face of fixed object, is now 2.44 meters.</p>
A77C2	<p>The length of the MW 150 x 14 line posts for the standard section of railing has been standardized to 1.83 meters. The length of the MW 150 x 14 posts, typically used for narrow roadway installations, is 2.13 meters. The length of the MW 150 x 22 posts, typically used for railing installations to shield fixed object with less than 1.2 meter offset from face of railing to face of fixed object, is now 2.44 meters. Details of plastic notched blocks have been added as an option to the use of notched wood blocks for steel post installations.</p>
A77C3	<p>This plan was formerly A77FA. Former Details C and D (Special Post Footings) has been deleted. The remaining details have been updated to conform to current standards.</p>
A77C4	<p>This plan contains details for typical railing delineation and dike positioning when used with guard railing. These details were moved from former Standard Plan A77F to this plan. The embankment widening shown on former Standard Plan A77F has been incorporated in the individual layout plans of the A77E, A77F and A77 G Series of Standard Plans.</p>
A77D1 and A77D2	<p>Standard Plans A77D1 and A77D2 provide guidance for placement of railing at structures, embankments and fixed objects. The diagrams refer to placement of railing by Cases. The Cases shown relate to the typical railing Layout used for these conditions. Do not include A77D1 and A77D2 in the list of standard plans applicable to a construction project. They are provided only as guidance to the designer.</p>
A77E Series	<p>This series of plans consists of new typical layouts for construction of railing to shield embankment slopes where railing is recommended. The new Type 11 Series of railing Layouts have been developed to cover the use of various end treatments dependent on site conditions.</p>

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A77F Series	This series of plans consists of new typical layouts for construction of railing at structure approaches and departures. The new Type 12 Series of railing has been developed for these installations. The structure approach railing includes the new railing transition (Type WB) developed for transitioning metal beam guard railing to bridge railing. Transition railing (Type WB) is compliant with NCHRP 350 requirements. Transition railing (Type WB) will be measured and paid for as a unit item. The Type 12E Layout includes the use of Transition railing (Type WB), standard metal beam guard railing, double metal beam guard railing, the new rail tensioning assembly, and a Caltrans approved crash cushion.
A77G Series	This series of plans consists of new typical layouts for construction of railing to shield fixed objects where railing is recommended. The new Type 14A, 15A and 16 Series of railing Layouts have been developed for these installations. The Type 14A Layout includes the use of standard metal beam guard railing, double metal beam guard railing, the new rail tensioning assemblies, end anchor assemblies (Type SFT), and Caltrans approved crash cushions. The Type 16 Series of railing Layouts has been developed to cover the use of various end treatments dependent on site conditions where shielding of roadside fixed objects is recommended.
A77H1	The formerly used terminology for anchors attached to the ends of metal beam railing has been changed by eliminating the use of the terms “terminal” and “end treatment.” This should eliminate the Type (SFT) being mistaken as a crashworthy end treatment. The Type (SFT) anchor is now identified as "End Anchor Assembly (Type SFT)." The dimensions of the wood post and the height of railing have been revised to be consistent with standard line post installations. The use of a longer steel foundation tube, without a soil plate, has been added as an option to using the specified length soil foundation tube with a soil plate.
A77H2	This plan contains a new detail for “Rail Tensioning Assembly.” This assembly is typically used for runs of double metal beam guard railing. An example of its use is shown on Standard Plans A77F3 and A77G1.
A77I1	The formerly used terminology for anchors attached to the ends of metal railing has been changed by eliminating the use of the terms “terminal” and “end treatment.” This should eliminate the Type (CA) being mistaken as a crashworthy end treatment. The Type (CA) anchor is now identified as "End Anchor Assembly (Type CA)." The location of the concrete anchor in relationship to the end of the railing has been revised. Use of this end anchor assembly should be limited to those locations where unique site conditions dictate its use. An example of its use is shown on Standard Plans A78E2.
A77I2	The formerly used terminology “end treatment” for this type of anchor attached to the end of metal beam railing has been changed by eliminating the words “end treatment.” The buried anchor is now identified as “Buried Post End Anchor.” The concrete footing has been removed. The length of the end post has been increased. The back-up plate at the connection of the rail element to the end post has been removed. The notes have been revised to provided more instructions on installation of this end anchor.
A77J1	The sheet contains new details for Metal Beam Guard Railing Connections to Bridge Railings Without Sidewalk where transition railing is only required for adjacent approach traffic. Connection Detail BB replaces former Connection Detail B. Connection Detail AA replaces former Connection Detail A. Connection Detail AA shows the connection of the new transition railing (Type WB) to the traffic approach end of the structure. The details for connecting metal railing to walls and abutments appear on Standard Plan A77J3.
A77J2	The sheet contains new details for Metal Beam Guard Railing Connections to Bridge

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	Railings Without Sidewalk where transition railing (Type WB) is required for both ends of the bridge railing.
A77J3	This plan contains details for connecting metal railing to walls and abutments. Connection Detail DD shows the connection of the new transition railing (Type WB) to the traffic approach side of the wall or abutment. Details for the construction of a concrete anchor block to attach the transition railing have been provided. The height of the top of the anchor block transitions from the height of the transition railing to 1525 mm above the finished grade at the intersection of the anchor block and the wall or abutment to be shielded. The elevation transition for the height of anchor blocks should be constructed with a 1:4 or flatter slope.
A77J4	This plan contains the new details for transition railing (w-beam railing to thrie beam railing to concrete railing). This configuration of transition railing meets NCHRP 350 Report TL-4 criteria.
A77K1	The sheet contains new details for Metal Beam Guard Railing Connections to Bridge Railings With Sidewalk where transition railing is only required for adjacent approach traffic. Metal post anchorage for railing connections on sidewalks and adjacent to sidewalks have been removed. Traffic approach and departure railings are now connected to the bridge railing at the back of the sidewalk. Plan sheet Note 6 provides for sidewalk elevation transitions where the sidewalk is not continuous beyond the end of the bridge railing.
A77K2	The sheet contains new details for Metal Beam Guard Railing Connections to Bridge Railings With Sidewalk where transition railing is required for both ends of the bridge railing. Plan sheet Note 6 provides for sidewalk elevation transitions where the sidewalk is not continuous beyond the end of the bridge railing.
A77L1	The details in the elevation view of the Terminal System (Type SRT) have been revised to correctly show where the railing is to be spliced. The 5-mm x 44 mm x 75mm-plate washer formerly shown for the rail connection to Post No. 1 has been deleted. Terminal System (Type SRT) is a flared end treatment for single-faced guard railing or barrier railing, which conforms to the crash, test requirements of NCHRP 350. Terminal System (Type SRT) consists of a slotted rail terminal system (SRT) which includes an 11.4 m length of flared guard railing end treatment, including an anchor assembly, within the terminal system's pay limits.
A77L2	This new plan has been added to show details for Terminal System (Type SKT), an in-line end treatment for single-faced guard railing or barrier railing which conforms to the crash test requirements of NCHRP 350. Terminal System (Type SKT) consists of an extruder terminal system which includes an 15.2 m length of guard railing end treatment, including an extruder anchor assembly, within the terminal system's pay limits
A77L3	The elevation view of the Terminal System (Type ET) has been revised by removing the phrase, "One continuous length of rail element," between Post Nos. 1 and 5. The elevation view shows two rail elements between Post Nos. 1 and 5. Plan sheet Note 10 allows the use of the continuous length of rail element between Post Nos. 1 and 5 for existing railing installations, but requires the use of two rail elements between Post Nos. 1 and 5 for new railing installations. Note 11 allows the substitution of a longer steel foundation tube without a soil plate for the combination steel tube with soil plate shown. Terminal System (Type ET) is in-line end treatment for single-faced guard railing or barrier railing, which conforms to the crash, test requirements of NCHRP 350. Terminal System (Type ET) consists of an extruder terminal system which includes an 15.2 m length of guard railing end treatment, including an extruder anchor assembly, within the terminal system's pay limits.

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A77L4	This plan shows details for Terminal System (Type CAT), an in-line end treatment for single-faced guard railing or barrier railing which conforms to the crash test requirements of NCHRP 350. Note 13 allows the substitution of a longer steel foundation tube without a soil plate for the combination steel tube with soil plate shown. Terminal System (Type CAT) consists of a crash cushion attenuating terminal system which includes an 9.5 m length of double metal beam guard railing end treatment, including an anchor assembly, within the terminal system's pay limits. The required 3.8-m length of double metal beam guard railing backup is paid for separately.
A77L5	This new plan has been added to show details for Terminal System (Type FLEAT), a linear flared end treatment for single-faced guard railing or barrier railing which conforms to the crash test requirements of NCHRP 350. Terminal System (Type FLEAT) consists of an extruder terminal system which includes an 11.4 m length of guard railing end treatment, including an extruder anchor assembly, within the terminal system's pay limits
A78 Series "GENERAL"	<p>Most of the A78 Series of Standard Plan sheets has been revised or new sheets developed so that end treatments and transition railing conform to the crash test requirements of the National Cooperative Highway Research Program Report 350 (NCHRP 350).</p> <ul style="list-style-type: none"> • The terminology for railing termini hardware has been revised by eliminating the terms "terminal" and "section" (as in terminal section and return section). Railing termini hardware is now identified as various types of end caps and return caps. • The typical layout configuration for thrie beam railing at fixed objects in medians has been revised and appears on A78D1. New details for the Type 25A Connection Layout have been developed to show the transition of double thrie beam median barrier to bridge railing (A78H).
A78A and A78B	This plan has been revised to show the actual length of a rail element (4.126 m) and the rail element splice interval of 3.8 meters. This should eliminate confusion by designers regarding the length of barrier railing required for a specific location (runs of line railing equal to multiples of 3.8 meters plus quantities for end treatments or anchors, as applicable). Measurement and payment for quantities of end treatments or anchors, as applicable, paid as unit items. A78B provides for the use of an approved-notched plastic block with steel line post installations as an option to use of notched wood blocks
A78C1	The terminology for hardware attached to the ends of thrie beam barrier has been changed by eliminating the use of the terms "terminal", "section", and "connector" as in terminal section, return section, and terminal connector. The hardware attached to the ends of thrie beam barrier is now identified as various types of end caps and return caps. The detail for "End Cap (Type TC)" formerly identified as "Terminal Connector" has been revised to conform to the dimensions necessary to connect metal transition railing to concrete railing.
A78C2	Details of notched plastic block have been added to this post and block detail sheet.
A78D1	The typical layout configuration for thrie beam railing at fixed objects in medians has been revised. Details for the construction of double thrie beam barrier on a bridge have been moved to A78D2
A78D2	This plan contains details for construction of double thrie beam barrier on bridges.
A78E1	This plan shows the end treatment for approach traffic and the end anchorage for

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	departure traffic for a single thrie beam barrier installation. Note 5 allows the substitution of a longer steel foundation tube without a soil plate for the steel tube and soil plate shown for the Type SFT end anchor assembly. The dimensions of the wood end post shown in the detail titled, "End Anchor For Traffic Departure End Of Single Thrie Beam Barrier," have been revised to reflect the correct size "135 mm x 185mm x 1165 mm."
A78E2	This plan contains details for an emergency passageway in double thrie beam barrier.
A78E3	This plan contains details for crash cushion end treatment for double thrie beam barrier
A78F1	This plan contains revised details for double thrie beam barrier connections to bridge railings without sidewalks. Connection Detail 1A shows the connection of the new transition railing (Type DTB) to the traffic approach end of the structure.
A78F2	This plan contains revised details for single thrie beam barrier connections to bridge railings without sidewalks. Connection Detail 2A shows the connection of the new transition railing (Type STB) to the traffic approach end of the structure.
A78G	This plan contains revised details for the connection of single thrie beam barrier to abutments and walls. Connection Detail 4A shows the connection of the new transition railing (Type STB) to the traffic approach side of the wall or abutment. Details for the construction of a concrete anchor block to attach the transition railing have been provided. The height of the top of the anchor block transitions from the height of the transition railing to 1525 mm above the finished grade at the intersection of the anchor block and the wall or abutment to be shielded. The elevation transition for the height of the anchor block should be 1:4 or flatter slope. Details for connecting thrie beam barrier to bridges with curbs have been removed and will require special design details.
A78H	This plan contains layout details for transitioning double thrie beam median barrier to connect to bridge railings.
A78I	This plan contains revised details for the transition of thrie beam barrier to concrete barrier. These details more closely conform to the new details for transition railing (metal railing to concrete structure). This configuration meets NCHRP 350 Report TL-4 criteria.
A78J	This plan contains the new details for transition railing (single thrie beam railing to concrete railing).
A78K	This new plan contains the new details for transition railing (double thrie beam railing to concrete railing).
A81A, A81B and A81C	No significant changes made to the details for sand filled crash cushions.
A82A1	No significant changes made to the details for Crash Cushion (Type CAT). Commonly know as the CAT-350 crash cushion. This traffic safety device is used in locations where both sides of the crash cushion would be exposed to traffic.
A82B1	No significant changes made to the details for Crash Cushion (Type ADIEM). Commonly know as the ADIEM-350 crash cushion. This traffic safety device is used in locations where both sides of the crash cushion would be exposed to traffic.

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A82C1, A82C2 and A82C3	No significant changes made to the details for Crash Cushion (Type REACT 9CBB). This version of the 9-cylinder REACT Crash Cushion (REACT 350.9) requires the use of a concrete backup block (CBB) as detailed on A82C1. A typical concrete transition from the backup block to a fixed object is detailed on A82C3. This traffic safety device is used in locations where both sides of the crash cushion would be exposed to traffic.
A82D1, A82D2 and A82D3	No significant changes made to the details for Crash Cushion (Type REACT 9SCBS). This version of the 9-cylinder REACT Crash Cushion (REACT 350.9) has a self-contained backup system (SCBS) as detailed on A82D1. A typical connection of the REACT 9SCBS to a fixed object is detailed on A82D2. A82D3 contains alignment-offset details for the installation of the REACT 9SCBS in a bi-directional traffic location where sufficient median width is available. This traffic safety device is used in locations where both sides of the crash cushion would be exposed to traffic.
A82D4	This new plan contains details for the Crash Cushion (Type REACT 62B060). This version of the REACT Crash Cushion is a dual column system with 27 cylinders and a self-contained backup system. This crash cushion is used where the width of the fixed object is greater than that which can be shielded by a single column system. The width of the fixed object should be not more than 1524 mm. This traffic safety device is used in locations where both sides of the crash cushion would be exposed to traffic
-----	A83, which contained details for portable scale pad and approach slab, has been deleted.
A85 and A86	No significant changes made to the details on these plans.
A87A	This plan contains revisions to the details, tables and notes for curbs and driveways. Formerly, details for curbs and driveways were a part of A87.
A87B	This plan contains the details for asphalt concrete dikes. Type B dike has been removed. The expanded backfill details for Types D and E Dike have been added. Formerly, details for asphalt concrete dikes were a part of A87.
A88A	The curb ramp details have been revised and are ADA compliant. Typical layouts of one-corner ramp and two-corner ramp have been added. The configuration of the curb ramps has been revised. The shape of the sloped ramp has been changed from a trapezoid to a rectangle. The detectable warning surface is used on all ramps and extends the full width and 914-mm depth of the ramp.
A88B	The curb ramp and passageway details have been revised and are ADA compliant. The location and dimensions of detectable warning surface on Case CM Curb Ramp and the passageways through raised-curbed traffic islands have been revised.
A90A and A90B	The details for accessible off-street parking stalls on A90A have been revised. The details for accessible on-street parking spaces on A90B have been revised. The detail for the "No Parking" pavement marking used within the painted pedestrian walkway isles has been added.
'P' SERIES – "GENERAL"	With the exception of Standard Plan P70, the P Series of Standard Plan sheets contains details for construction of new jointed plain concrete pavement and the retrofitting of dowels into existing concrete pavement transverse joints.
P1	This new plan contains details for the construction of new jointed plain concrete pavement, lane/shoulder addition or reconstruction.

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P2	This new plan contains details for the construction of new wide panel jointed plain concrete pavement. Used where a widen concrete lane with an asphalt concrete shoulder is desired. Use with Std. Plan P1.
P5	This new plan contains details for the construction of undoweled jointed plain concrete pavement. Used for concrete pavement shoulder addition/reconstruction when next to an undoweled lane and for interior lane reconstruction when adjacent lanes on both sides are not doweled. This is a limited application. See HDM Section 603.2.
P7	This new plan contains details for the retrofitting existing concrete pavement with dowel bars (Longitudinal Joints coincide with Lane line Pavement Delineation). Used to re-establish load transfer across transverse joints.
P10	This new plan contains details for the dowel bars used with the construction of concrete pavement. This plan shows tolerance, orientation, and actual dowel bar layout. This plan should always accompany Std. Plan P1
P12	This new plan contains details for the dowel bar baskets used with the construction of concrete pavement. Use with Std. Plan P1.
P17	This new plan contains details for the tie bar baskets used with the construction of concrete pavement. Use with Std. Plan P1.
P18	This new plan contains lane schematics and isolation joint details for concrete pavement. This plan shows all general cases where isolation joints are to be located. This plan to be used for all new concrete applications.
P20	This new plan contains concrete pavement joint details. Use with Std. Plan P1. This plan to be used for all locations where saw cutting joints will be needed. Details can also be used for replacing seals.
P30	This new plan contains concrete pavement end panel pavement transitions. Use with Std. Plan P1. Use where concrete paving lane abuts to existing pavement at a transverse joint.
P35	This new plan contains concrete pavement ramp gore area paving details. Use when ramps or gore areas are in concrete pavement areas.
P45	This new plan contains details for shoulder drainage inlet details in concrete pavement Use for projects with shoulder drainage inlets without aprons.
P46	This new plan contains details for shoulder drainage inlet details in concrete pavement. Use for projects with shoulder drainage inlets with aprons.
P70	This new plan contains details for longitudinal tapered-notched wedge joint used with asphalt concrete paving.
'C' SERIES – "GENERAL"	No significant changes made to the details for crib walls on these plans.
'D' SERIES – "GENERAL"	Other than the 'D' Series of plans listed herein, no significant changes have been made to the remaining 'D' Series plans.
D72, D73, D74A and D74B	These plans have been revised to provide clear direction on acceptable methods for attaching pipe to standard inlets.

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D78A	D78A replaces old Standard Plan D78.
D78B and D78C	These new plans provide details for the construction of inlet depressions in asphalt concrete and Portland Cement Concrete shoulders.
D97H	This plan has been revised to show differences in minimum joint overlap for reinforced concrete pipe for watertight vs. non-watertight applications.
-----	D101, which contained details for channel slope protection, has been deleted. Details for construction of channel slope protection are to be developed based on the needs of the project and included as part of project plan set.
'H' SERIES – "GENERAL"	Other than the 'H' Series of plans listed herein, no significant changes have been made to the remaining 'H' Series plans.
H7	The backflow preventer assembly has been moved to H8. The cam coupler assembly has been added to this plan.
H8	The details formerly on H8 have been moved to H9. H8 now contains the details for the backflow preventer assembly and its assembly enclosure.
H9	This plan contains the details formerly on H8 with the exception of the deletion of the details for pipe anchor Type II.
H10	This plan contains the details for the irrigation controller enclosure cabinet without electrical components. These details formerly appeared on ES-3H.
'T' SERIES –	
T1A, T1B, T2, T3, T4, T5 and T7	No significant changes made to the details on these plans.
T10 and T10A	Updated signs and sequencing of signs to conform to 2003 MUTCD standards. Deleted optional C18 "ROAD CONSTRUCTION AHEAD" sign. Increased distance between advance signs to 800 m and 450 m respectively. Increased tangent length between lane closure tapers to 500 m. Deleted notations in Note 2 for time of day and length of closure.
T11 and T12	Updated signs and sequencing of signs to conform to 2003 MUTCD standards. Deleted optional C18 "ROAD CONSTRUCTION AHEAD" sign. Updated Table 1 for taper length and cone spacing to conform to 2003 MUTCD standards. Added new Table 2 for buffer space to conform to 2003 MUTCD standards.
T13	Updated signs and sequencing of signs to conform to 2003 MUTCD standards. Deleted optional C18 "ROAD CONSTRUCTION AHEAD" sign. Added new C16 "ONE LANE ROAD AHEAD" sign to advance sign sequence. Changed wording on C36 sign to "BE PREPARED TO STOP." Added new Table 1 for buffer space to conform to 2003 MUTCD standards. Added notation in Note 7 to include 6-m diameter illumination footprint for flagger station.
T14	No significant changes made to the details on these plans
T15, T16 and T17	Added notation to Note 5 to include Type VII, VIII, or IX retroreflective sheeting and fluorescent orange color on vehicle-mounted signs. Added Note 12 to allow use of one

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	shadow vehicle when work vehicles are in close proximity to each other. Deleted SC13 "DO NOT PASS" sign on V4 (T17).
T51 Through T59	These are all new plans which contain temporary water pollution control details for temporary facilities: silt fence, straw bale barrier, covers for slopes and stockpiles, erosion control blankets, fiber roll, check dams, construction entrances, and concrete washout facility. These details were formerly included in project plans as construction details.
'B' SERIES – "GENERAL"	Other than the 'B' Series of plans listed herein, no significant changes have been made to the remaining 'B' Series plans.
B2-3	Details for the 600-mm diameter cast-in-drilled-hole concrete piles (900-kilonewton-design capacity) have replaced those formerly shown for a 400-mm diameter pile.
B2-5	Numerous changes have been made to this plan.
-----	B2-6, which contained details for Class 400C and Class 625C, has been deleted.
B2-8	Numerous changes have been made to this plan.
B6-21	The details for Type A, AL, and B seals have been revised.
B7-1	Detail S-3 has been revised.
B7-8	This is a new plan that contains various deck drain details.
B8-5	The details for clearance requirements for ducts have been revised.
B11-53	The transition details for the ends of the barrier railing have been revised to accommodate the new railing transition connection typically used. See Standard Plan A77J4. The details for the electrolier pedestal also have been revised.
B11-54	The detail for metal railing connection to bridge railing has been revised.
B11-55	The transition details for the ends of the barrier railing have been revised to accommodate the new railing transition connection typically used. See Standard Plan A77J4. The details for the electrolier pedestal also have been revised.
B11-56	The transition details for the ends of the barrier railing have been revised to accommodate the new railing transition connection typically used. See Standard Plan A77J4. The details for the electrolier pedestal also have been revised.
B11-57	This new plan contains details for Type 742 Concrete Barrier
B11-60 and B11-61	These new plans contain details for Type 80 Concrete Barrier. This concrete barrier is commonly referred to as see-through barrier.
B11-62, B11-63 and B11-64	These new plans contain details for Type 80SW Concrete Barrier. This concrete barrier with sidewalk is commonly referred to as see-through barrier.
B11-65	This new plan contains details for California ST-30 Bridge Rail. This barrier railing consists of metal tubular railing attached to steel post on concrete curb. This bridge rail is commonly referred to as see-through railing.

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B11-66 and B11-67	These new plans contain details for California ST-40 Bridge Rail. This barrier railing consists of metal tubular railing attached to steel post on the sidewalk portion of the bridge. This bridge rail is commonly referred to as see-through railing.
B11-68, B11-69 and B11-70	These new plans contain details for California ST-10 Bridge Rail. This barrier railing consists of metal tubular railing attached to steel post on the sidewalk portion of the bridge. This bridge rail is commonly referred to as see-through railing.
B15-1 through B15-15	These new plans contain details for masonry block sound walls. These plans were formerly XS sheets furnished by the Office of Structure Design.
'RS' SERIES – "GENERAL"	Other than the changes to RS1 listed herein, no significant changes have been made to the remaining 'RS' Series plans.
RS1	This plan has been revised to change the lateral offset dimensions and associated notes.
'S' SERIES – "GENERAL"	The order of the 'S' Series plans has been rearranged and in some cases renamed and renumbered. The supports for the overhead sign (truss) and overhead sign (tubular), S1 through S37, have been revised in accordance with AASHTO "Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals" 4 th Edition (2001) with 2002 Interim changes. S81 through S92 are all new standard plans showing construction details for laminated and formed panel signs. S81 through S92 will be used when laminated and formed panel signs are to be furnished by the contractor. Previously these panels were state-furnished items. S93, S94 and S95 are all new standard plans showing construction details for framing of single-sheet aluminum sign panels. S93, S94 and S95 will be used for construction area signs or when permanent signs are to be furnished by the contractor. S101 through S116 are new plans containing details for the construction of the Model 500 changeable message sign. S120 through S135 are new plans containing details for the construction of the Model 510 changeable message sign. S140 through S142 are new plans containing details for the construction of the Model 500 and Model 510 changeable message signs.
S1	This plan "OVERHEAD SIGNS-TRUSS INSTRUCTIONS AND EXAMPLES" contains similar information shown on former Revised Standard Plan RSP S1 with updates. See 'S' Series – "General" comments.
S2	This plan "OVERHEAD SIGNS-TRUSS SINGLE POST TYPE, POST TYPES II THRU IX" contains similar information shown on former Revised Standard Plan RSP S2 with updates. See 'S' Series – "General" comments.
S3	This plan "OVERHEAD SIGN-TRUSS SINGLE POST TYPE, BASE PLATE AND ANCHORAGE DETAILS" contains similar information shown on former Standard Plan S2 with updates. See 'S' Series – "General" comments.
S4	This plan "OVERHEAD SIGNS-TRUSS SINGLE POST TYPE, STRUCTURAL FRAME MEMBERS DETAILS No. 1" contains similar information as former Standard Plan S4 with updates. See 'S' Series – "General" comments.
S5	This plan "OVERHEAD SIGNS-TRUSS SINGLE POST TYPE, STRUCTURAL FRAME MEMBERS DETAILS No. 2" contains similar information as shown on former Standard Plan S4 with updates. See 'S' Series – "General" comments.
S6	This new plan "OVERHEAD SIGNS-TRUSS, GUSSET PLATE DETAILS" contains similar information as shown on former Revised Standard Plans RSP S2 and RSP S3 with updates. See 'S' Series – "General" comments.

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S7	This plan "OVERHEAD SIGNS-TRUSS SINGLE POST TYPE, SQUARE PEDESTAL FOUNDATION" contains similar information as shown on former Revised Standard Plan RSP S13 with updates. See 'S' Series – "General" comments.
S8	This plan "OVERHEAD SIGNS-TRUSS SINGLE POST TYPE, ROUND PEDESTAL FOUNDATION" contains similar information as shown on former Revised Standard Plan RSP S13 with updates. See 'S' Series – "General" comments.
S9	This plan "OVERHEAD SIGNS-TRUSS TWO POST TYPE, POST TYPES I-S THRU VII-S" contains similar information as shown on former Revised Standard Plan RSP S3 with updates. See 'S' Series – "General" comments.
S10	This plan "OVERHEAD SIGNS-TRUSS TWO POST TYPE, BASE PLATE AND ANCHORAGE DETAILS" contains similar information as shown on former Revised Standard Plan RSP S3 with updates. See 'S' Series – "General" comments.
S11	This plan "OVERHEAD SIGNS-TRUSS, TWO POST TYPE, STRUCTURAL FRAME MEMBERS" contains similar information as shown on former Revised Standard Plan RSP S5 with updates. See 'S' Series – "General" comments.
S12	This plan "OVERHEAD SIGNS-TRUSS, STRUCTURAL FRAME DETAILS" contains similar information as shown on former Revised Standard Plan RSP S6 with updates. See 'S' Series – "General" comments.
S13	This plan "OVERHEAD SIGNS-TRUSS, FRAME JUNCTURE DETAILS" contains similar information as shown on former Revised Standard Plan RSP S7 with updates. See 'S' Series – "General" comments.
S14	This plan "OVERHEAD SIGNS-TRUSS TWO POST TYPE, SQUARE PEDESTAL FOUNDATION" contains similar information as shown on former Revised Standard Plan RSP S13 with updates. See 'S' Series – "General" comments.
S15	This plan "OVERHEAD SIGNS-TRUSS TWO POST TYPE, ROUND PEDESTAL FOUNDATION" contains similar information as shown on former Revised Standard Plan RSP S13 with updates. See 'S' Series – "General" comments.
S16	This plan "OVERHEAD SIGNS- WALKWAY DETAILS No. 1" contains similar information as shown on former Standard Plan S9 with updates. See 'S' Series – "General" comments.
S17	This plan "OVERHEAD SIGNS- WALKWAY DETAILS No. 2" contains similar information as shown on former Standard Plan S10 with updates. See 'S' Series – "General" comments.
S18	This plan "OVERHEAD SIGNS- WALKWAY SAFETY RAILING DETAILS" contains similar information as shown on former Revised Standard Plan RSP S11. See 'S' Series – "General" comments.
S19	This plan "OVERHEAD SIGNS-TRUSS, SIGN MOUNTING DETAILS, LAMINATED PANEL-TYPE A" contains similar information as shown on former Revised Standard Plan RSP S8C. See 'S' Series – "General" comments.
S20	This plan "OVERHEAD SIGNS-STEEL-FRAMES, REMOVABLE SIGN PANEL FRAMES" contains similar information as shown on former Revised Standard Plan RSP S8A. See 'S' Series – "General" comments.

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S21	This plan "OVERHEAD SIGNS-REMOVABLE SIGN PANEL FRAMES, MOUNTING DETAILS" contains similar information as shown on former Standard Plan S8B. See 'S' Series – "General" comment.
S22	This plan "OVERHEAD SIGNS-TRUSS REMOVABLE SIGN PANEL FRAMES 2794 mm and 3048 mm SIGN PANELS" contains similar information as shown on former Standard Plan S8D. See 'S' Series – "General" comments.
S30	This plan "OVERHEAD SIGNS-TUBULAR INSTRUCTIONS AND EXAMPLES" contains similar information as shown on former Standard Plan S40N with updates. See 'S' Series – "General" comments.
S31	This plan "OVERHEAD SIGNS-TUBULAR SINGLE POST TYPE, LAYOUT AND PIPE SELECTION" contains similar information as shown on former Standard Plan S40P with updates. See 'S' Series – "General" comments.
S32	This plan "OVERHEAD SIGNS-TUBULAR TWO POST TYPE, LAYOUT AND PIPE SELECTION" contains similar information as shown on former Revised Standard Plan RSP S40Q. See 'S' Series – "General" comments.
S33	This plan "OVERHEAD SIGNS-TUBULAR STRUCTURAL FRAME DETAILS No.1" contains similar information as shown on former Standard Plan S40R with updates. See 'S' Series – "General" comments.
S34	This plan "OVERHEAD SIGNS-TUBULAR STRUCTURAL FRAME DETAILS No. 2" contains similar information as shown on former Revised Standard Plan RSP S40S. See 'S' Series – "General" comments.
S35	This plan "OVERHEAD SIGNS-TUBULAR SINGLE AND TWO POST TYPE, BASE PLATE AND ANCHORAGE DETAILS" contains similar information as shown on former Revised Standard Plan RSP S40T. See 'S' Series – "General" comments.
S36	This plan "OVERHEAD SIGNS-TUBULAR SINGLE AND TWO POST TYPE, SQUARE PEDESTAL PILE FOUNDATION" contains similar information as shown on former Revised Standard Plan RSP S40U. See 'S' Series – "General" comments.
S37	This plan "OVERHEAD SIGNS-TUBULAR SINGLE POST AND TWO POST TYPE-ROUND PEDESTAL PILE FOUNDATION" contains similar information as shown on former Revised Standard Plan RSP S40U. See 'S' Series – "General" comments.
S41	This plan "OVERHEAD SIGNS-LIGHTWEIGHT BALANCED-SINGLE STEEL POST, CONNECTION AND MOUNTING DETAILS" contains the corresponding information shown on former Standard Plan S14A. Revised HS bolt call out on "PART ELEVATION." Chase nipple detailing revised at "Elevation A" and 'Part Elevation.'
S42	This plan "OVERHEAD SIGNS-LIGHTWEIGHT BALANCED-SINGLE STEEL POST DETAILS" contains the corresponding information shown on former Standard Plan S14B. Mounting hardware in "Detail K" revised to refer to S87 and Note 2. Note 2 added to specify torque for sign panel mounting bolts.
S43	This plan "OVERHEAD SIGNS-LIGHTWEIGHT TYPE A, CONNECTION DETAILS" contains the same information as shown on former Standard Plan S15.

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S44	This plan "OVERHEAD SIGNS-LIGHTWEIGHT TYPE B, CONNECTION DETAILS" contains the corresponding information as shown on former Standard Plan S16. HS bolt information revised in "Post to Arm Framing Data" Table. Arrow for galvanizing the drain hole in "Post Cap" detail revised to point to hole at top of post.
S45	This plan "OVERHEAD SIGNS-LIGHTWEIGHT TYPE C, CONNECTION DETAILS" contains the corresponding information shown on former Revised Standard Plan RSP S17. HS bolt information revised at "Section J-J" and at "Post to Arm Framing Data" Table.
S46	This plan "OVERHEAD SIGNS-LIGHTWEIGHT SIGN PANEL MOUNTING DETAILS, LAMINATED PANEL-TYPE A" contains the corresponding information shown on former Standard Plan S18A. Mounting hardware in "Section G-G" revised to refer to S87 and Note 2. The note, "The location of the vertical splice line will be determined by the Engineer," has been added to "Mounting Beam Spacing" Table. Note 1 has been revised.
S47	This plan "OVERHEAD SIGNS-LIGHTWEIGHT LIGHT FIXTURE MOUNTING DETAILS" contains the corresponding information shown on former Standard Plans S18B. HS bolt information revised in "Side View-Double Faced Sign-End Mount" detail. The note referring to "Fluorescent Sign lighting Equipment (915 mm)" for signs less than 1676 mm in length has been removed from the detail, "Side View-Single Faced Sign Types A, B & C, Lighting Fixture Mounting Detail, Signs Greater Than 1676 mm In Length."
S48	This plan "OVERHEAD SIGNS-LIGHTWEIGHT POST DETAILS" contains the corresponding information shown on former Revised Standard Plan RSP S20A. Chase nipple detailing revised at "Elevation A" and 'Part Elevation."
S49	This plan "OVERHEAD SIGNS-LIGHTWEIGHT FOUNDATION DETAILS" contains the same information as shown on former Revised Standard Plan RSP S20B.
S60	This plan "OVERHEAD SIGNS-BOX BEAM CLOSED TRUSS-FOUNDATION DETAILS" contains the same information as shown on former Standard Plan S39.
S61	This plan "OVERHEAD SIGNS-BOX BEAM CLOSED TRUSS-TWO POST TYPE, FRAME MEMBERS" contains the same information as shown on former Standard Plan S40A.
S62	This plan "OVERHEAD SIGNS-BOX BEAM CLOSED TRUSS-SINGLE AND TWO POST TYPE, GENERAL FRAME DETAILS" contains the same information as shown on former Standard Plan S40B.
S63	This plan "OVERHEAD SIGNS-BOX BEAM CLOSED TRUSS-RIBBED SHEET METAL DETAILS" contains the same information as shown on former Standard Plan S40C.
S64	This plan "OVERHEAD SIGNS-BOX BEAM CLOSED TRUSS- TWO POST TYPE, FRAME DETAILS" contains the same information as shown on former Standard Plan S40D.
S65	This plan "OVERHEAD SIGNS-BOX BEAM CLOSED TRUSS- TWO POST TYPE, FRAME JUNCTURE DETAILS" contains the same information as shown on former Standard Plan S40E.

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S66	This plan "OVERHEAD SIGNS-BOX BEAM CLOSED TRUSS- TWO POST TYPE, POST DETAILS" contains the same information as shown on former Standard Plan S40F.
S67	This plan "OVERHEAD SIGNS-BOX BEAM CLOSED TRUSS- SINGLE POST TYPE, FRAME MEMBERS" contains the same information as shown on former Standard Plan S40G.
S68	This plan "OVERHEAD SIGNS-BOX BEAM CLOSED TRUSS- SINGLE POST CANTILEVER, FRAME DETAILS" contains the same information as shown on former Standard Plan S40H.
S69	This plan "OVERHEAD SIGNS-BOX BEAM CLOSED TRUSS- SINGLE POST CANTILEVER, FRAME JUNCTURE DETAILS" contains the same information as shown on former Standard Plan S40I.
S70	This plan "OVERHEAD SIGNS-BOX BEAM CLOSED TRUSS- SINGLE POST CANTILEVER, POST DETAILS" contains the same information as shown on former Revised Standard Plan RSP S40J.
S71	This plan "OVERHEAD SIGNS-BOX BEAM CLOSED TRUSS- SINGLE POST BUTTERFLY, FRAME DETAILS" contains the same information as shown on former Standard Plan S40K.
S72	This plan "OVERHEAD SIGNS-BOX BEAM CLOSED TRUSS- SINGLE POST, BUTTERFLY FRAME JUNCTURE DETAILS" contains the same information as shown on former Standard Plan S40L.
S73	This plan "OVERHEAD SIGNS-BOX BEAM CLOSED TRUSS- SINGLE POST BUTTERFLY, POST DETAILS" contains the same information as shown on former Revised Standard Plan RSP S40M.
S81 through S92	These are all new standard plans showing construction details for laminated and formed panel signs. These sign plans were previously available only through Caltrans Publications Unit. The plans will be used when laminated and formed panel signs are to be furnished by the contractor. Previously these panels were state-furnished items.
S93, S94 and S95	These are all new standard plans showing construction details for framing of single-sheet aluminum sign panels. These sign plans were previously available only through Caltrans Publications Unit. The plans will be used for construction area signs or when permanent signs are to be furnished by the contractor.
S101 through S116	These new plans contain details for the construction of the Model 500 changeable message sign.
S120 through S135	These new plans contain details for the construction of the Model 510 changeable message sign.
S140, S141, S142	These new plans contain details for safety railing and gusset plates used with the Model 500 and 510 changeable message signs.
'ES' SERIES – "GENERAL"	The header for the sheet title of this series of plans has been changed to begin with the words, "Electrical Systems." The supports for the Traffic Signals and Luminaires have been revised to sustain a 161 km/h (100 mph) 3-second wind gust using the 2001

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	AASHTO Specifications. Those 'ES' Series plans not listed herein have no other significant changes.
ES-1A	Under the heading of "Electroliers," Type 35 and 36-20A lighting standards have been added and Type 22 lighting standard has been deleted.
ES-1B	New symbols have been added for fiber optic conduit and Type 15FBS standard. Signal heads have been changed and all are now 300 mm.
ES-1C	This new plan contains part of the information removed from ES-1A and 1B. New symbols, including those for service enclosure, have been moved from other plan sheets to this plan.
ES-2B	Former notes 2 and 3 have been combined into one note. Note 11 is new.
ES-2C	Note 11 is new
ES-2D, ES-2E and ES-2F	All notes have been revised. Note 7 is new.
ES-2G	This new plan contains details for service equipment and typical wiring diagram for Type III-D Series.
ES-3B	The wiring diagram for flashing beacon control assembly has been revised.
ES-3E and ES-3F	The wiring diagram on both plans has been revised to show the thermostatically controlled switch to be normally open. The shape of the ventilator housing shown on ES-3F has been changed to a square instead of a dome
ES-3H	This plan has been revised to include only the electrical components of the irrigation controller enclosure cabinet. Additional details of the irrigation controller enclosure cabinet without electrical components have been moved to Standard Plan H10.
ES-4A	Rearranged configuration of details for signal heads. Some of the notes have been moved to ES-1A.
ES-4B	The dimension for the " Meter On" sign have been removed and the detail has been revised (shown to scale).
ES-4C	The advanced flashing beacon details have been moved to ES-7J. The backplate for combination heads has been eliminated.
ES-4E	Notes and abbreviations moved to ES-1A.
ES-5A	The general notes have been revised. An additional note has been added to the typical loop connection detail. The depth of the slot has been revised to be proportionally correct in Sections A-A, B-B and C-C.
ES-5B	Loop detector symbols moved to ES-1C. Winding detail for Type C loop detector configuration has been revised.
ES-5C	Detail for Type A pedestrian push button has been deleted. The details for the 3-light signal signs have been deleted.

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-----	Former plan ES-5D has been deleted.
ES-5D	This plan was former plan ES-5E. Type B handhole details have been deleted. New “T” trench detail has been added.
ES-6A	The general notes have been revised. Type 22 lighting standard has been deleted. The details for the barrier have been revised to be consistent with the new types of barrier. Base plate data changed for Pole Type 15. Luminaire arm data (Mounting Height) has been revised.
ES-6B	The height of the base plate above finished railing has been revised. The bolt circle diameter for Type 15 has been revised.
ES-6D	The Type 22D standard has been deleted. The thickness of the arm plate as shown in “Section B-B” has been revised. The size of fillet weld as shown in “Detail C” has been revised. The “Luminaire Arm Data (P Mounting Height)” has been revised. The length of the anchor bolts has been revised.
ES-6E	The dimensions in “Detail A-Type 30” have been revised. The dimensions of the luminaire-arm-plate size in “Detail A-Type 31” have been added and other dimensions revised. The minimum yield stress has been revised. Handhole now refers to ES-7M for details.
ES-6F	Note 4 has been modified.
ES-6G	Plate dimensions have been revised in “Detail A.” The dimension from the center of the electrical conductor hole to the top of pole has been revised. Anchor bolt length has been revised. Base plate dimensions have been revised.
ES-6I	The former note describing construction of the handhole, in the elevation view, has been deleted.
ES-6J	The slip fit length has increased by 50 mm.
ES-6K	“General Notes” have been revised. The thickness of the base plate of the steel pole in “Detail A” has been revised to match “Section K-K.”
ES-7A	New details for the Type 15TS standard have been added to this plan. The base plate thickness, anchor bolt circle diameter, and base plate to post fillet weld have been revised.
ES-7B	Base plate thicknesses have been revised. Base plate, anchor bolts, and pole threads for Type 1-B have been revised. The former “Base plate” detail for Type 1-D has been deleted. Type 1-D now uses same base plate detail as Type 1-B and Type 1-C.
ES-7C	Anchor bolt length has been revised. The “P Mounting Height” data for the 9.1-m pole has been revised.
ES-7C through ES-7H	These plans now show the attachment of pedestrian push button, pedestrian signal head, and side-mounted vehicle head to the signal and lighting standard.
ES-7D, ES-7E and ES-7G	Signal arm data and pole data changed in the table at the bottom of the plan sheet.

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ES-7F	CIDH pile diameter, luminaire mounting height, signal arm data, pole data and base plate data have been revised.
ES-7H	Signal and luminaire arm data changed in the table at the bottom of the plan sheet.
ES-7I	The dimension of the sign on the left side of the arm extension has been revised. The length of the pole has been revised. The bolt circle diameter has been revised. The distance from the centerline of mast arm to top of pole has been revised. Anchor bolt length has been revised. Grout added below base plate.
ES-7J	The details for the new Type 15 FBS and the Types 1-A, 1-B, 1-C and 1-D advance flashing beacons have been added to this plan.
ES-7K	The height of the flashing beacon control assembly has been revised. Handhole revised. Welding revised at "Type 9" detail.
ES-7L	Welding at "Mast Arm Details" has been revised. Handhole revised. Anchor bolts revised.
ES-7M	"General Notes" have been revised.
ES-7O	The details have been rearranged. The "Sign Placement" table now includes longer mast arms.
ES-8	Grout and a drainhole have been added to the pull box details. Note 4 has been rearranged and renumbered.
ES-9A	Detail I has been revised and Detail A has been added.
ES-9D	Added a dimension between the pull box and face of railing in the end view detail for No. 3½, 5 or 6 pull box installation. The details for No. 9 pull box installation have been revised.
ES-9E	Additional holes are shown in the No.7 ceiling pull box detail.
ES-10	Note 3 has been revised.
ES-11	The setback (dimension A) has been revised to be from the side of the pole and not the center of the pole. The table for the set back dimensions has been modified to include the Types 15D and 15-SB standards and deleting Type 22 standard.
ES-13A	Insulation Method A has been deleted
ES-13B	Details for the typical banding of conductor ends have been revised. Induction sign lighting has replaced mercury lamp ballast in the table for luminaire ballast fusing.
ES-14A	The details for ballast chassis component layout and reflector shape have been deleted. The detail, "Cross-Section of Sign," has been revised.
ES-14B	The new wiring diagram replaces the one formerly shown on this plan.
ES-14C	The height of the FBCA (1.8 m) is measured from finished grade to the bottom of the

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	FBCA. Welding revised at connection of angles to post.
ES-15A	The lamp size and sign load has been removed from the table. Conductors have been removed from the "Conduit Entrance Detail." Galvanized clamps are now required to attach the conduit to the walkway grating.
ES-15B	The "Typical Wiring and Sign Switch Installation Detail", "Lighting Fixture Mounting Details (Typical)", "Ballast Box Details", and "Typical Fixture Wiring Diagram (Two Lamp) Detail" have been deleted.
ES-15C	The height of the NEMA 3R enclosure (1.8 m) is measured from the finished grade to the bottom of the enclosure.
ES-15D	Former Type SC1 Sign Control, Type SC2 Sign Control and Type SC3 Sign Control have been renamed Type LC1 Control, Type LC2 Control and Type LC3 Control, respectively. Former Type SC4 Sign Control and Type SC5 Sign Control have been renamed Type SC1 Control and Type SC2 Control, respectively. The details for Type SC3 Control have been added.
ES-16A	The 'J' box on top of the pole has been eliminated. "General Notes" have been revised. Minimum mortar pad dimension changed.
ES-16B	The 'J' box on top of the pole has been eliminated. "General Notes" have been revised.
ES-16C	A 75-mm clearance for the reinforcing steel at the bottom of the concrete foundation has been added. "General Notes" have been revised. Slip fit length has increased by 50 mm. Handhole revised to refer to ES-7M.